### STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. <u>LA0111091</u>; Al <u>28118</u>; <u>PER20080002</u> to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS:

Harrelson Materials Management, Inc.

1101 Russell Road Shreveport, LA 71107

II. PREPARED BY:

Eura DeHart

**DATE PREPARED:** 

October 17, 2008

III. PERMIT ACTION:

reissue LPDES permit LA0111091 (LWDPS WP4879).

AI <u>28118</u>; <u>PER20</u>080002

LPDES application received: August 7, 2008

EPA has not retained enforcement authority.

LWDPS permit issued: September 17, 1994 LWDPS permit expired: September 16, 1999

## IV. FACILITY INFORMATION:

- A. The application is for the discharge of landfill wastewater, including contact and noncontact stormwater, from the Harrelson Materials Management, Inc. construction/demolition debris landfill. Stormwater will be accumulated in an onsite storm water retention pond for discharge through Outfall 001.
- The facility is located at 1101 Russell Road in Shreveport, Caddo Parish.
- C. The treatment facility consists of a stormwater retention pond.

E. Outfall 001

Discharge Location:

Latitude 32° 32' 2.184" North

Longitude 93° 47' 38.94" West

Description:

landfill wastewater associated with a construction/demolition

debris landfill (including contact and noncontact stormwater)

Expected Flow:

varies' with rainfall

Statement of Basis

LA0111091; AI 28118; PER20080002

Page 2

### V. RECEIVING WATERS:

The discharge is into a parish drainage ditch, thence into Twelve Mile Bayou, thence into the Red River in segment 100304 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100304 of the Red River Basin are as indicated in the table below 1/2:

| Overall<br>Degree of<br>Support for<br>Segment<br>100304 | Degree of Si                     | upport of Each                     | າ Use                                |   |                             |                           |             |
|--|----------------------------------|------------------------------------|--------------------------------------|---|-----------------------------|---------------------------|-------------|
| Full   | Primary<br>Contact<br>Recreation | Secondary<br>Contact<br>Recreation | Propagation<br>of Fish &<br>Wildlife | Outstanding<br>Natural<br>Resource<br>Water | Drinking<br>Water<br>Supply | Shell fish<br>Propagation | Agriculture |
|  | Full                             | Full                               | Full                                 | N/A   | Full                        | N/A                       | Full        |

<sup>&</sup>lt;sup>1/</sup>The designated uses and degree of support for Segment 100304 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100304 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

## VII. <u>HISTORIC SITES:</u>

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

## VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Statement of Basis <u>LA0111091</u>; AI <u>28118</u>; <u>PER20080002</u> Page 3

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart Water Permits Division Department of Environmental Quality Office of Environmental Services P. O. Box 4313 Baton Rouge, Louisiana 70821-4313

## IX. PROPOSED PERMIT LIMITS:

## Final Effluent Limits:

Subsegment 100304, Twelve Mile Bayou - Origin to Red River, is listed on LDEQ's Final 2006 303(d) list as impaired for dissolved oxygen (EPA – Category 5). To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Red River Basin, those suspected causes for impairment which are not directly attributed to the landfill wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit.

'i iS

Syde

... iS

### **Dissolved Oxygen**

Landfill wastewater, including contact and noncontact stormwater will be collected in the onsite detention pond where it will undergo natural biological treatment. Routing the discharge into the onsite detention pond will eliminate the direct flow from the facility into waters of the state during dry water (critical) conditions. Overflow from the onsite detention pond into the Twelve Mile Bayou watershed would only be expected during a rain event (non-critical conditions). To protect against the potential for oxygen consuming pollutants that cause or contribute to instream dissolved oxygen impairments, oygen-demanding substances will be limited through a BOD<sub>5</sub> limitation. Compliance with the BOD<sub>5</sub> limitation as the indicator parameter will result in the control of oxygen-demanding substances from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with Part I of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Part II of the final permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

# OUTFALL 001 - Landfill wastewater from a construction/demolition debris landfill

The effluent limitations for the facility are set in accordance with 40 CFR. Part 445, Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category and and the LPDES Multi – Sector General Permit. Sector L. These limits are similar to those found in the General Permit for construction and demolition debris landfills (LAG780000).

Statement of Basis LA0111091; AI 28118; PER20080002 Page 4

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

|                            | 1               | <del></del>   |  |
|----------------------------|-----------------|---------------|--|
| Effluent<br>Characteristic | Monthly<br>Avg. | Daily<br>Max. | Basis  |
| BOD <sub>5</sub>           | 37 mg/l         | 140 mg/l      | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| TSS                        | 27 mg/l         | 88 mg/l       | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| TOC                        |                 | 50 mg/l       | BPJ based on the Multi-Sector General Permit,<br>Sector L. (May, 2006)   |
| Oil & grease               |                 | 15 mg/l       | BPJ based on the Multi-Sector General Permit,<br>Sector L. (May, 2006)   |
| Total<br>Recoverable Iron  |                 | 1.0 mg/l      | BPJ based on the Multi-Sector General Permit,<br>Sector L. (May, 2006)   |
| Ammonia-<br>Nitrogen       | 4.9 mg/l        | 10 mg/l       | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| a-Terpineol                | 0.016 mg/l      | 0.033 mg/l    | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| Benzoic Acid               | 0.071 mg/l      | 0.12 mg/l     | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| p-Cresol                   | 0.014 mg/l      | 0.025 mg/l    | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| Phenol                     | 0.015 mg/l      | 0.026 mg/l    | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |
| Zinc                       | 0.11 mg/l       | 0.20 mg/l     | Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for Landfills Point Source Category. |

<sup>\*</sup>Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

## Other Effluent Limitations:

#### 1) pН

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

#### 2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Statement of Basis

LA0111091; Al 28118; PER20080002

Page 5

## X. PREVIOUS PERMITS:

## LWDPS Permit No. WP 4875/ LPDES Permit No. LA0111091:

Issued: September 17, 1994 Expired: September 16, 1999

| Effluent Characteristic | Discharge L       | <u>imitations</u> | Monitoring Req | Monitoring Requirements |  |
|-------------------------|-------------------|-------------------|----------------|-------------------------|--|
|                         | <u>Daily Avg.</u> | <u>Daily Max.</u> | Measurement    | Sample                  |  |
|                         |                   |                   | Frequency      | Туре                    |  |
| Flow                    | Report            | Report            | 1/week         | Estimate                |  |
| TOC                     | ·                 | 50 mg/l           | 1/week         | Grab                    |  |
| Oil and Grease          |                   | 15 mg/l           | 1/week         | Grab                    |  |
| Turbidity               | Report            | Report            | 1/week         | Grab                    |  |

## XI. <u>ENFORCEMENT AND SURVEILLANCE ACTIONS:</u>

## A) Inspections

A review of the files indicates the most recent inspection was performed on July 22, 2008. The following was noted:

Failure to comply with Order to Upgrade OU-0158 associated Interim Operational Plan (IOP). LAC 33.VII.901.A.

During inspection, several areas of concern noted, including compliance with IOP Item #3, at least two waste loads were comprised of almost entirely cardboard and other packing material and therefore non-C&D waste.

IOP #6 Waste is not being dumped and managed in the smallest practical area and covered with minimum of 12 inches silty clays every fourteen days.

IOP #7 Incidental non-acceptable waste not being stored in closed container prior to later being removed.

IOP #10 Facility failed to take immediate action to control and extinguish an underground fire (smoke coming from ground) occurring at time of inspection.

## B) Compliance and/or Administrative Orders

A review of the files indicates that a Compliance Order (Enforcement Tracking No. SE-C-06-0233) was issued to the facility on October 6, 2006.

The following was noted in the Compliance Order:

- Failure to have adequate equipment available to achieve the operational requirements at the facility
- Failure to deposit waste in the smallest practical area each day, compacted, and cover with silty clays every 14 days
- Accepted commercial waste from a cabinet manufacturer consisting mainly of particle board (some with glued plastic laminate), and hardwood trim, for processing at the facility (as amended on December 22, 2006).

On August 8, 2008, a Compliance Order & Notice of Potential Penalty (Enforcement Tracking No. SE-CN-08-0332) was issued to the facility for violations noted during inspections conducted on or about March 19, 2008 and July 22, 2008.

Statement of Basis <u>LA0111091</u>, Al <u>28118</u>; <u>PER20080002</u> Page 6

## C) DMR Review

There are no recent DMRs on file for this facility.

## XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for construction and demolition debris facilities.

## XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

## XIV. REFERENCES:

<u>Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy,"</u> Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards,"</u> Louisiana Department of Environmental Quality, 2004.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program,"</u> Louisiana Department of Environmental Quality, 2004.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United

LDEQ-EDMS Document 38897192, Page 39 of 44

Statement of Basis <u>LA0111091</u>; AI <u>28118</u>; <u>PER20080002</u> Page 7

States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, Harrelson Materials Management, Inc., Harrelson Materials Management, Inc. Landfill, August 7, 2008.